

CLAIMS

1. Femoral prosthesis of a hip able to allow the articulation of a femur (11) in a corresponding acetabular seating (13) and comprising at least a femoral head (12) of  
5 a hemispherical shape able to be inserted into said acetabular seating (13), and pin means (18) able to be engaged and clamped in a top portion (21) of said femur (11), characterized in that said femoral head (12) is a distinct and removable component with respect to said pin  
10 means (18) and that said pin means (18) are provided with, or are associated with, coupling means (15, 115) able to be inserted into a mating seating (14) of said femoral head (12) in order to obtain a removable constraint between said femoral head (12) and said pin means (18).
- 15 2. Femoral prosthesis as in claim 1, characterized in that said coupling means comprise a flange-type insert (15, 115).
3. Femoral prosthesis as in claim 2, characterized in that said flange-type insert (15, 115) is connected to said pin  
20 means (18) and is able to be coupled and inserted in said mating seating (14).
4. Femoral prosthesis as in claim 2 or 3, characterized in that said flange-type insert (15) comprises a first portion (15b) able to be coupled by means of a first coupling in  
25 said mating seating (14) made in said femoral head (12).
5. Femoral prosthesis as in claim 4, characterized in that said first coupling is of the conical type.
6. Femoral prosthesis as in claim 4 or 5, characterized in that said first portion (15b) is hollow inside and defines  
30 a relative seating to at least partially surround said top portion (21) and to attach thereto.
7. Femoral prosthesis as in any claim hereinbefore, characterized in that said coupling means (15, 115) are

removable with respect to said pin means (18).

8. Femoral prosthesis as in claims 2 and 7, characterized in that said flange-type insert (15) comprises a second portion (15a), in which a seating (17) is made, able to  
5 allow a second coupling of said flange-type insert (15) with an upper end (22a) of said pin means (18).

9. Femoral prosthesis as in claim 7 or 8, characterized in that said second coupling is of the conical type.

10. Femoral prosthesis as in claim 8 or 9, characterized in  
10 that in the upper zone of said second portion (15a) there is a housing seating (25) for an attachment screw (26) able to clamp said flange-type insert (15) in an assembled condition with said pin means (18).

11. Femoral prosthesis as in claim 3, characterized in that  
15 said flange-type insert (115) is able to be rested on said top portion (21).

12. Femoral prosthesis as in claim 11, characterized in that said flange-type insert (115) is in the shape of a flat disc, having in its central portion a seating (117)  
20 for the coupling and the attachment of an upper end (22a) of said pin means (18).

13. Femoral prosthesis as in any claim from 2 to 12 inclusive, characterized in that said flange-type insert (15, 115) is coupled eccentrically with said femoral head  
25 (12).

14. Femoral prosthesis as in claims 5 and 9, characterized in that the axis of the cone of said first coupling is coaxial with respect to the axis of the cone of said second conical coupling.

30 15. Femoral prosthesis as in claims 5 and 9, characterized in that the axis of the cone of said first coupling is angled with respect to the axis of the cone of said second conical coupling.

16. Femoral prosthesis as in claims 5 and 9, characterized in that the axis of the cone of said first coupling is offset and parallel with respect to the axis of the cone of said second conical coupling.

5 17. Femoral prosthesis as in any claim from 2 to 16 inclusive, characterized in that said flange-type insert (15, 115) is able to be cemented on said top portion (21).

18. Femoral prosthesis as in claim 1, characterized in that said coupling means (15, 115) are made in a single piece  
10 with said pin means (18).

19. Femoral prosthesis as in any claim hereinbefore, characterized in that said femoral head (12) is made of a different anti-wear material with respect to said pin means (18), which are made of a material able to be easily  
15 integrated with a bone tissue.

20. Femoral prosthesis as in any claim from 2 to 19 inclusive, characterized in that said pin means (18) and said flange-type insert (15, 115) are made of titanium or titanium alloy, whereas said femoral head (12) is made of a  
20 cobalt alloy, or other material with high mechanical resistance.

21. Femoral prosthesis as in any claim hereinbefore, characterized in that said pin means (18) are substantially conical in shape, with a lesser section at a first end  
25 (22b) on the side where it is inserted in said top portion (21), and a greater section at a second end (22a) towards said coupling means (15, 115).

22. Femoral prosthesis as in any claim from 1 to 20 inclusive, characterized in that said pin means (18) are  
30 substantially cylindrical in shape.

23. Method to implant a femoral prosthesis as in any one of the previous claims, characterized in that in a first step a pin (18) is inserted from the top portion (21) of a femur

(11) letting an upper end thereof (22a) emerge, then a flange-type insert (15, 115) is coupled and clamped to said upper end (22a) and finally a femoral head (12) is coupled and clamped to said flange-type insert (15, 115).